

# **UTILIZATION OF DATE SEEDS AS SUPPLEMENTARY NUTRIENT FOR ALCOHOLIC STAGE IN PRODUCTION OF CIDER VINEGAR**

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Several factors are considered to affect the alcoholic fermentation of vinegar production. Addition of suitable supplementary nutrient could lead to speeding up the growth of yeast, increasing the yield, and shortens the duration of this stage. Our previous study on addition of mineral salts as supplementary nutrient had shown no effect in speeding up the alcoholic stage of cider vinegar. In this study, the addition of milled date seeds was investigated at three levels (0, 1, and 2%). The results showed that the difference in growth of yeast and consequently production of ethanol at the above mentioned treatments were significant ( $p < 0.01$ ). The rate of conversion sugar to alcohol at the first 24 h of fermentation was 0, 22, and 44% for treatments with 0, 1, and 2% milled date seeds respectively. The possibility of using date seeds in this field will be discussed in detail.